

DETAILED ACTION

1. Applicant's amendment filed March 3, 2010 has been fully considered, however not persuasive. Therefore, the following action is made final.

Claim Rejections - 35 USC § 103

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. **Claims 1, 7- 10, 14-17, and 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nayyar et al. U.S. Pat. No. 5,853,785 in view of Schenk U.S. Pat. No. 4,206,244 and Kimura JP 2001-346518.**

Regarding claims 1, 7- 9, 21, and 22 Nayyar discloses a dry confectionery premix which comprises a carbon dioxide generating composition, i.e., a food grade acid mixed with sodium carbonate (col. 4, lines 4-15) and a stabilizer i.e., gums (col. 4, line 30-40). Although ascorbic or succinic acid are not explicitly disclosed, they are well know and commonly used in the art as food acids, as shown in the dry premix of Schenk (col. 2, line 35) and Kimura [0004]. Nayyar discloses the amount of sodium bicarbonate to range from 0.2-2%, but is silent on the amount of food grade acid used. Although the examples of the reference show an amount of acid which would result in a ratio outside of the presently claimed amount, however considering the reference as a whole would lead a person of ordinary skill in the art to utilize an amount of food acid effective for the release of carbon dioxide, as stated in col. 4, line 12. Therefore it would have been obvious to one of ordinary skill in the art to choose food acid, and in effective amount,

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including that presently claimed to utilize for a carbon dioxide generating composition contingent upon the desired taste and pH level of the final product.

The recitation in the claim that the premix composition is “for preparing an aerated confectionery product” is merely an intended use. Applicants attention is drawn to MPEP 2111.02 which states that intended use statements must be evaluated to determine whether the intended use results in a structural difference between the claimed invention and the prior art. Only if such structural difference exists, does the recitation serve to limit the claim. If the prior art structure is capable of performing the intended use, then it meets the claim.

It is the examiner’s position that the intended use recited in the present claims does not result in a structural difference between the presently claimed invention and the prior art and further that the prior art structure is capable of performing the intended use. Given that Nayyar disclose a dry confectionery premix composition as presently claimed, it is clear that the composition of Nayyar would be capable of performing the intended use, i.e. preparing an aerated confectionery product, as presently claimed as required in the above cited portion of the MPEP.

Also, regarding “the aerated confectionery product is an ice cream”, although Nayyar does not disclose the frozen confectionary product as ice cream; Kimura discloses an ice cream. Therefore, one of ordinary skill would have been motivated to modify Nayyar for the purpose of producing ice cream especially since Nayyar discloses using milk as the liquid mixed with the premix and freezing it for a prolonged period (col. 1, line 65).

Furthermore, the functional language of the claim i.e. “wherein the type an amount of the acid and carbonate salt are selected such that when the premix is mixed with water to give a final

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solids content of at least about 20 wt%, an aerated confectionery product is formed, in the absence of mechanical aeration, has an overrun of at least about 30% (or at least about 70%) and a pH of greater than about 5.8 (or about 6.0)” only applies if or when the premix composition is mixed with water. It is noted that the prior art premix, being of the same composition is expected to meet the aforementioned limitation when mixed with water as presently claimed.

Regarding claims 10, Nayyar discloses a product which is particulate (col. 2, lines 47-50) and is a chilled (col. 1, line 56).

Regarding claims 14-17 and 23, Nayyar discloses a method of preparing a confectionery product which comprises mixing the premix, as applied to claim 1 above, with an aqueous liquid to give a final solid content of at least 20% (col. 4, lines 57-61) the product is aerated by shaking (col. 5, line 20) and chilled to a temperature of -6.5°C (col. 1, line 49). It is noted that prior art product, being of the same composition and produced in the absence of mechanical aeration, is expected to meet the pH value presently claimed, as well as the overrun limitation of at least about 30% (or at least about 70%). The reference does not disclose the frozen confectionary product as ice cream. Kimura discloses an ice cream. One of ordinary skill would have been motivated to modify Nayyar for the purpose of producing ice cream especially since Nayyar discloses using milk as the liquid mixed with the premix and freezing it for a prolonged period (col. 1, line 65).

Response to Amendment

4. Claims 1, 7-10, 14-17, and 21-23 are currently pending. Claims 2-6, 11-13, and 18-20 are cancelled.

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5. Applicant's amendment filed March 4, 2010 is sufficient to overcome the 35 U.S.C §112, first and second paragraph rejections of the previous office action. Therefore the rejection has been withdrawn.

Response to Arguments

6. Applicant's arguments filed March 3, 2010 have been fully considered but they are not persuasive.

Applicant argues;

the combination of Nayyar, Schenk, and Kimura does not present a case of prima facie obviousness under § 103(a) at least because the combination neither teaches nor suggests a premix which includes a *carbon dioxide generating composition based solely on ascorbic acid, succinic acid or their mixtures and the recited carbonate salts wherein the type and amount of the acid and carbonate salt are selected such that when the premix is mixed with water to give a final solids content of at least about 20 wt%, an aerated confectionery product is formed which, in the absence of mechanical aeration, has an overrun of at least about 30% and a pH of greater than about 5.8; and wherein the aerated confectionery product is an ice cream.* (Page 7-8)

Regarding “based solely on ascorbic acid, succinic acid or their mixtures and the recited carbonate salts”, there is nothing in the present claims that requires that the carbon dioxide generating composition is limited to the recited acids and carbonate salts and that in light of the open language of the present claims, i.e. comprising, the carbon dioxide generating composition is open to the inclusion of additional ingredients.

Nayyar discloses a premix which includes a carbon dioxide generating composition based on food grade acids and carbonate salts. It is noted that the reference does not disclose the acids as solely ascorbic acid, succinic acid, or mixtures thereof, however the reference does disclose food acid, which naturally include ascorbic and succinic acid (as taught by Schenk and Kimura). Although citric acid is shown in an embodiment of the reference, considering the reference as a

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whole does not limit the food acid to just citric acid. Applicant is reminded of, “applicant must look to the whole reference for what it teaches. Applicant cannot merely rely on the examples and argue that the reference did not teach others.” In re Courtright, 377 F.2d 647, 153 USPQ 735,739 (CCPA 1967).

Therefore, it would have been obvious to one of ordinary skill in the art, given Nayyar’s teaching of the uses of food acids, that any food acid, including ascorbic and succinic could have been used in the carbon dioxide generating composition. Further, it is noted that the prior art premix, being of the same composition is naturally expected to give a final solids content of at least about 20 wt%, an aerated confectionery product is formed, in the absence of mechanical aeration, has an overrun of at least about 30% (or at least about 70%) and a pH of greater than about 5.8 (or about 6.0) when mixed with water.

Applicant further argues;

the carbon dioxide releasing system is taught by Nayyar to both further facilitate the development of fine grained ice crystals and to provide a pleasant, refreshing, organoleptic effect. (Page 8)

Nayyar discloses a carbon dioxide generating system as presently claimed, although the systems may be employed for different reasons, the systems are identical (i.e. food grade acid and carbonate salt) and both produce carbon dioxide, therefore, it is the examiner’s position that the intended use does not result in a structural difference between the presently claimed invention and the prior art and further that the prior art structure is capable of performing the intended use.

Applicant’s argument of;

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Nayyar is silent about overrun or aeration of frozen confections, let alone that the type and amount of the acid and carbonate salt are selected such that when the premix is mixed with water an aerated confectionery product is formed which, in the absence of mechanical aeration, has an overrun of at least about 30%. In fact the words overrun (or over run) and aeration do not appear in the publication. (Page 8)

It is noted that Nayyar is silent to the overrun and aeration of the product; however given that the prior art premix, being of the same composition as that presently claimed, it is expected to meet the aforementioned limitation when mixed with water as presently claimed.

Regarding applicant's argument to Schenk (U.S 4,206,244) and Kimura (JP 2001-346518), it is noted Schenk and Kimura do not disclose a dry mix as presently claimed, however note that while Schenk and Kimura do not disclose all the features of the present claimed invention, the references are used as a teaching references, and therefore, it is not necessary for these secondary references to contain all the features of the presently claimed invention, *In re Nievelt*, 482 F.2d 965, 179 USPQ 224, 226 (CCPA 1973), *In re Keller* 624 F.2d 413, 208 USPQ 871, 881 (CCPA 1981). Rather these references teach a certain concept, namely the use of food acids, specifically ascorbic acid and carbonate salts in a carbon dioxide generating system, and in combination with the primary reference, discloses the presently claimed invention.

Applicant argument that the references are directed to a different objective technical problems from applicants' invention are noted; however although Nayyar does not explicitly disclose ice cream, Nayyar does disclose an aerated frozen confection using milk as the liquid mixed with the premix and freezing it for a prolonged period, which would render ice cream an

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obvious product to one of ordinary skill. Nayyar's premix is expected to meet the limitation (pH and overrun) as presently claimed, being that it is the same composition as presently claimed.

Applicant's argument concerning the provided data has been noted, however is not persuasive. Applicant points to comparative data for the explanation of unexpected results; however with respect to citric acid the data is not persuasive given that there is only proper side-by-side comparison between example 2 and (comparative) example 4. Example 4, utilizes citric acid. Although the pH is slightly lower than that presently claimed, the results are not unexpected or surprising given that one of ordinary skill in the art would expect that using different acids would result in different pH and that it would have been obvious to one of ordinary skill in the art to choose acid depending on the desired acidity of the end product. Therefore, there is no disclosure that using ascorbic acid results in unexpected or surprising results. With respect to the calcium carbonate, the data is not persuasive (example 1 vs. example 6) given that the data is not commensurate in scope with the scope of the closest prior art given that Nayyar does not utilize calcium carbonate. Further, all examples only provided for one amount of acid and one amount of carbonate and are not commensurate in scope with the scope of the present claims. As set forth in MPEP 716.02(d), whether unexpected results are the result of unexpectedly improved results or a property not taught by the prior art, "objective evidence of nonobviousness must be commensurate in scope with the claims which the evidence is offered to support". In other words, the showing of unexpected results must be reviewed to see if the results occurred over the entire claimed range, *In re Clemens*, 622 F.2d 1029, 1036, 206 USPQ 289, 296 (CCPA 1980).

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Regarding applicant's argument of the purpose of the current invention (page 11), the argument is noted, however, although there is no requirement expressly stated by the prior art of record for overrun and no issue of the pH becoming too low, the prior art does disclose the acid/carbonate systems and achieve the presently claimed overrun amounts for an aerated product. Therefore, even if there is no expressed disclosure of requirement, the prior art still meets the present claims.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LELA S. WILLIAMS whose telephone number is (571)270-1126. The examiner can normally be reached on Monday to Thursday from 7:30am-5pm (EST).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Callie Shosho can be reached on 571-272-1123. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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